## Utah Bicycle Helmet Use



### Bicycle Helmet Use Observational Survey Key Findings

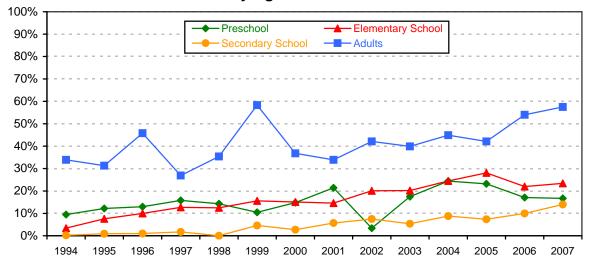
- Adult bicyclists have the highest helmet use over the 14 years of the survey at 44.9%, followed by elementary school aged bicyclists at 16.6%.
- 19,145 bicyclists have been observed in the survey [3.5% preschool aged (ages 0-4), 71.8% elementary school aged (ages 5-11), 14.7% secondary school aged (ages 12-18), 10.0% adults (ages 19+)].
- Helmet use has increased for all ages from 5.4% in 1994 to 27.8% in 2007.

### 1994-2007 Utah Bicycle Helmet Use Data

### **Utah Bicycle Helmet Use Results**

- Helmet use for preschool aged bicyclists fell from 17.1% in 2006 to 16.7% in 2007.
- Elementary school aged bicyclists have had the largest increase in helmet use during the study from 3.4% in 1994 to 23.4% in 2007. However, helmet use for elementary school aged bicyclists has decreased from a high of 28.1% in 2005.
- In 1994, helmet usage for secondary school aged bicyclist was less than 1% and in 2007 it was at 14%, a 40% increase from the 10% helmet usage observed in 2006.
- Adult bicyclists have shown the smallest increase in helmet use during the survey, but have consistently had the highest usage of all age groups.

### Percentage of Bicycle Helmet Use By Age 1994-2007



AGE GROUP	94	95	96	97	98	99	00	01	02	03	04	05	06	07
0-4 Years	9.5	12.2	13.0	15.8	14.3	10.5	14.8	21.4	3.4	17.5	24.4	23.2	17.1	16.7
5-11 Years	3.4	7.6	10.0	12.7	12.5	15.6	15.1	14.6	20.1	20.2	24.5	28.1	21.9	23.4
12-18 Years	0.2	0.9	1.0	1.7	0.0	4.6	2.7	5.7	7.5	5.4	8.8	7.4	9.9	14.0
19 Years +	33.9	31.3	45.8	26.9	35.4	58.3	36.8	33.9	42.1	39.9	44.9	42.1	54.0	57.5

### 1994-2007 Helmet Observation Data

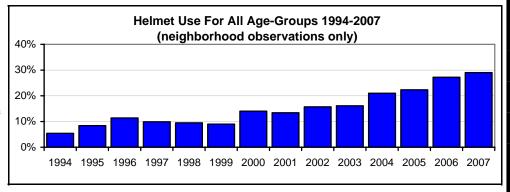
# School vs. Neighborhood Helmet Use for Ages 5-11 40% 30% 20% 1995 1997 1999 2001 2003 2005 2007

### School vs. Neighborhood

Nearly half (48.3%) of the observed bicyclists, were elementary school children observed at the elementary schools in the study. As shown in the graph to the left, helmet usage is higher for bicyclists ages 5-11 at the school than it is in the neighborhoods surrounding the schools.

### **Neighborhood Helmet Use**

The graph to the right has helmet use data for all age groups from the neighborhood observations. Helmet use has increased significantly since the survey began in 1994, from 5.4% to 29.03% in 2006.



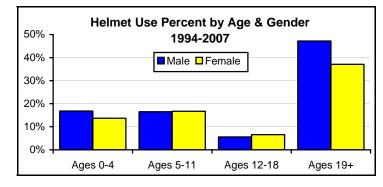
## Helmet Use Percent by SES for Ages 5-11 1994-2007 40% High SES Low SES 30% 20% All School Neighborhood

### **Helmet Use and Socioeconomic Status (SES)**

Bicyclists ages 5-11 in High SES areas had helmet usage almost twice that of bicyclists in Low SES areas (see graph to the left). SES was determined by the percentage of students enrolled in the free/reduced-cost lunch program at the school where the observation was conducted. (High SES = 0-25% enrollment; Low SES = >25% enrollment).

### **Helmet Use and Gender**

70% of observed bicyclists were male. The graph to the right shows the gender breakdown of helmet us by age group. Overall, 18.2% of male bicyclists were observed wearing a helmet compared to 16.9% of female bicyclists.



### **Prevention Information**

- Bicycle helmets reduce the risk of head and brain injury by 85-88%.<sup>1</sup>
- It is estimated that in Utah 3 lives, 60 hospitalizations, 920 emergency department visits and \$19 million in health care costs could be saved each year if every bicyclist wore a helmet.<sup>2</sup>
- In the U.S., 93% of bicyclists killed are not wearing a helmet, compared to only 5% of bicyclists killed wearing a helmet.<sup>3</sup>
- A bicycle helmet is only effective when it is worn properly. A helmet should fit snug, level on the head, cover the forehead with the chin strap buckled and snug.



Data Sources: 1 New England Journal of Medicine 1989;320:1361-1367. 2 Journal of Injury Prevention 2002;8:47-52. 3 Insurance Institute for Highway Safety.